

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

Claims 1-4. **(Cancelled)**

5. **(Currently amended)** In a piezoelectric actuator, comprising

a multilayer construction of piezoelectric layers (2) and inner electrodes (3, 4), which are located in a piezoelectrically active region (A) between the layers and can be acted upon by an electrical voltage, and

at least one inactive region (B, C) without inner electrodes in the layer construction of the piezoelectric actuator (1), the improvement wherein

the at least one inactive region (B, C) without inner electrodes is formed of a material whose mechanical and thermal properties, including shrinkage upon sintering of the multilayer construction of the piezoelectric actuator (1), match the mechanical and thermal properties of the active region (A), including the combination and interaction of the material comprising the piezoelectric layers (2) and the inner electrodes (3, 4),

wherein the inactive regions (B, C) and the active region (A) are made from an identical ceramic basic substance, with additional dopants inserted into the inactive regions (B, C), wherein the basic substance is lead zirconate titanate (PZT), and the dopant is silver,

Appl. No. 10/524,788
Amdt. dated Feb. 20, 2007
Reply to Office action of Oct. 17, 2006

and wherein the matching mechanical and thermal properties of the piezoelectric layers (2) of
the inactive region (B, C) and of the active region (A), include thermal expansion and
elasticity.

Claims 6-10. **(Canceled)**